Right-of-Way Plans Manual

Guidelines & Standards for development, distribution, & use of ALDOT Right-of-Way plans

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I. Introduction

A. General

1. The purpose of this document is to establish guidelines and standards for the development of ALDOT Right-of-Way plans.

2. The guidelines and standards set forth in this document are intended to ensure that the Right-of-Way plans are legible, consistent in appearance, accurate, and completed in a timely manner.

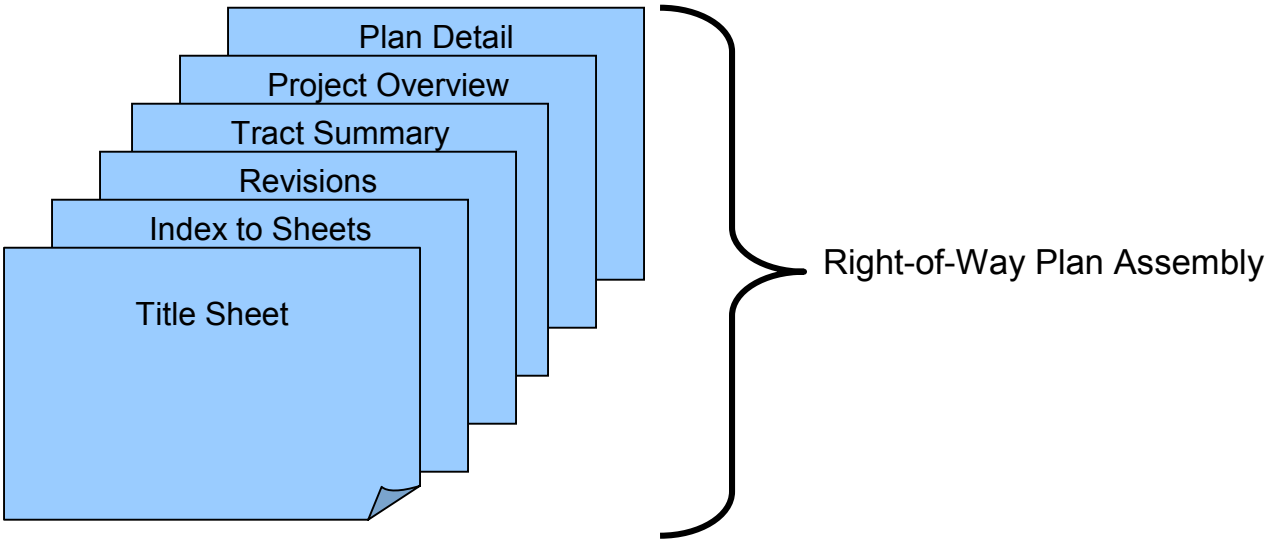
3. Any deviations from the ***Guidelines*** and ***Standards*** set forth in this document require prior approval by the State Right-of-Way Engineer.

4. ***Guidelines*** in this manual are intended to provide guidance, define intent and establish parameters for tasks related to, directly or indirectly, Right-of-Way plan development.

5. ***Standards*** in this manual define what is considered mandatory for Right-of-Way plan development, and typically contain the word “shall”.

6. Right-of-Way plans consist of a Plan Assembly and one or more Acquisition Deeds.

7. *Plan Assemblies* contain multiple sheets containing information such as vicinity maps, tables of calculations, and detailed plan views.



8. An *Acquisition Deed* consists of a Deed Form and Property Plat.

9. *Plan Assemblies* and *Acquisition Deeds* are developed in order to initiate and expedite the Right-of-Way acquisition process.

10. The *plans* referred to in this document are not to be confused with the Contract Plans, although there is much information common to both. For full construction details, please refer to the Contract Plans.

11. The new Right-of-Way *plans* formatting set forth in this documentation replaces the formatting used on the traditional Right-of-Way roll maps.

B. Intended Audience

1. This document provides guidelines and standards that are to be adhered to by ALDOT personnel, consulting firms under contract with ALDOT, and counties or cities receiving State funds.

2. Personnel preparing Right-of-Way plans should review all sections of this document. For quick reference, sections of this manual specific to disciplines other than Right-of-Way are indicated in the following table:

Contracts	Survey	Design	Project Management
Introduction	Data Collection	Data Collection	Submittals
	Electronic Files	Electronic Files	
		Design of R-O-W Limits	

3. Please refer to the Guideline for Operations (GFO) for ALDOT policy pertaining to this manual.

C. Guideline for Operations

(Preliminary Draft, Pending Approval)

ALABAMA
DEPARTMENT OF TRANSPORTATION
GUIDELINES FOR OPERATION

SUBJECT: Right-of-Way Plans Manual – "Guidelines and Standards for the production, distribution, and use of Right-of-Way plans"

The Alabama Department of Transportation Data Management Board has approved that all new projects begun after the date of this Guideline have Right-of-Way plans that adhere to the ALDOT "Right-of-Way Plans Manual". The guidelines and standards set forth in this document are intended to ensure that the Right-of-Way plans are legible, consistent in appearance, accurate, and completed in a timely manner.

Access to ALDOT's Right-of-Way Plans Manual – "Guidelines and Standards for the production, distribution, and use of Right-of-Way plans" is available through the Alabama Department of Transportation's Right-of-Way Bureau web page at:

http://www.dot.state.al.us/bureau/Right_of_Way/Mapping/mapping.htm

or Intranet web page at:

http://csms1/Bureau/Right_of_Way/Mapping/mapping.htm.

These web pages will also link to the latest production version of the CADD standards, documentation concerning download and installation, a history of any updates and a listing of contact personnel for support issues.

It shall be the responsibility of the Right-of-Way plans preparer to ensure Right-of-Way plan compliance with the guidelines and standards.

RECOMMENDED FOR APPROVAL: _____
STATE RIGHT-OF-WAY ENGINEER

APPROVAL: _____
CHIEF ENGINEER

APPROVAL: _____ _____
TRANSPORTATION DIRECTOR DATE

D. Consultant Agreements

1. The Division Right of Way Engineer shall be responsible for the review and approval of fee proposals and invoices related to Right-of-Way plans and deed development.

2. Contracted services for Contract plans and Right-of-Way plans shall be awarded to the same consultant.

3. The same consultant shall also be awarded the Field Survey contract, unless the survey is performed by ALDOT or it is deemed necessary to be performed far in advance of the design phase.

4. Consultants providing fee proposals for Right-of-Way plans and deed production should note that the "Data Collection" guidelines outlined in this document are ***not*** considered a part of the Right-of-Way plans man-day estimate. **Do not include "Field Survey" tasks in the Right of Way plans man-day estimates and fee proposals.**

5. A "taking" is defined as a segment of property acquired by ALDOT for highway construction purposes. This includes parcels, drainage easements, construction easements, and excess properties. "Takings" dictate the size and detail of the plan assembly, the number of property deeds and sketches, and the time required to complete these tasks.

6. Proposals for Right-of-Way plans shall be based on the total number of "takings". For large tracts that border large segments of a project, there exists the possibility of several "takings" for that particular tract.

7. As part of the fee-proposal, a list of tax parcel identification numbers of all affected tracts shall be submitted. **Do not submit a copy of the tax map unless specifically requested.**

8. The consultant shall be responsible for all revisions to the Right-of-Way plans including, but not be limited to, the following occurrences:

    a) Design changes
    b) Errors and omissions related to data collection and/or plan preparation
    c) Property sell-offs

9. Supplemental agreements for the Contract plans will usually require a supplemental agreement for Right-of-Way plans.

10. Completion of the Right-of-Way plans shall be defined as that time when ALDOT approves payment of 100%, plus retainage, of the agreed-upon fee.

11. Final payment to consultants shall not be approved until all requirements are met. Refer to “Final Submittal” sub-section in “”Schedule for Submittals” section.

12. There shall be no discrepancies between the Right-of-Way plans and Contract Plans at final submittal.

13. The State Right-of-Way Engineer and the Division Right-of-Way Engineer reserve the right to return or refuse Right-of-Way plans that do not conform to the guidelines and standards outlined in this manual.

14. Consultants preparing Right-of-Way plans shall not be paid for work completed until reviewed and approved by ALDOT.

15. ALDOT reserves the right to terminate consultant contracts for non-compliance with guidelines, standards and timelines set forth in this manual.

16. The consultant shall be required to attend an orientation session before beginning work on the Right-of-Way plans. The consultant will be responsible for contacting the ALDOT Right-of-Way Bureau to schedule this meeting.

II. Field Survey

A. General Guidelines

1. Field Survey refers to the process of compiling and plotting all survey data pertaining to existing boundary lines, man-made structures, and natural features. Of special interest are the topographical features that may be impacted in some way by highway construction and that play a vital role in the Right-of-Way acquisition process.

2. Field surveys shall meet the needs of both the roadway designer and the property appraiser responsible for evaluating the affected properties.

3. The Field Survey guidelines herein are provided to ensure that property-related topography is collected and interpreted properly, as this information is the foundation upon which the Right-of-Way plans and all subsequent computations are based.

4. Intent shall always take precedence when interpreting the information found in the Right-of-Way plans.

B. Disclaimer

1. ALDOT does **not** perform boundary surveys.

2. ALDOT is neither responsible for property boundary disputes nor makes any attempt to resolve such matters.

3. It is the policy of ALDOT to replicate existing property lines on the Right-of-Way plans as accurately as possible, but with consideration of the limitations of tax maps, source deeds, monumentation, and other available data.

4. It is the intent of ALDOT to compute the Before, Acquired, and Remainder areas for the sole purpose of determining "fair market value".

5. Surveying technology and software has neither wisdom nor common sense. No guideline can substitute for experience and professional judgment.

C. Research

1. The county Tax Assessor maintains records of ownership of individual parcels of land as well as Ad Valorem (Tax) maps showing the relationship of record tracts of land and plats of subdivisions. This information can be used to locate specific deeds and descriptions for the subject tracts of land. Overlaying the preliminary project control line, construction limits, and required right of way on the tax map will assist in identifying the affected tracts.

2. Check with the Tax Assessor's office to see if affected properties have any pending splits or sell-offs that are not reflected on tax maps.

3. Once the affected and adjacent tracts are identified, use the parcel ID numbers to obtain owner and source deed information. If affected properties fall within a recorded subdivision, recorded plats need to be obtained.

4. Ownership names and source deed book & page should be shown accurately in the Right of Way plans. Where affected properties fall within a recorded subdivision, recorded plats need to be obtained. The subdivision map book & page should also be shown in the plans.

5. On projects that follow an existing roadway, the present ROW needs to be verified. This can be obtained from existing ROW maps and/or as-built plans. Sources for this information include ALDOT, city, and county engineering departments.

6. The original control line shall be plotted on the plans to assist in establishing the existing ROW.

D. Site Improvements

1. A survey and/or field review should be conducted to show all improvements to affected properties. All improvements that fall within the proposed Right-of-Way should be located and shown on the plans, including but not limited to the following:

    a) Buildings
    b) Outbuildings
    c) Sheds
    d) Fences
    e) Septic systems
    f) Walks and drives
    g) Ponds
    h) Other site improvements

12. For affected tracts that fall outside of the proposed Right-of-Way, obtain topography of structures and major site improvements within the general project corridor.

13. For extremely large properties, improvements may need to be shown that fall outside the general project corridor.

14. The type of improvement and its affect on the value of the affected property will define the limits of the survey.

15. The specific data collection requirements will be determined during the pre-proposal meeting, and/or by the approved “Scope of Work”.

16. It is important that minimum distances can be scaled on the plans between the required right of way line and the nearest point on an improvement (structure) found outside the required right of way. This includes porches, canopies, etc. and requires that this topography be accurately surveyed and indicated on the plans.

E. Landmarks

1. Identify and label all intersecting roads along the project corridor such as the following:
   - U.S. route number
   - State route number
   - County route number
   - County road name
   - City street name
   - Locally accepted road name (if known) when above is not applicable

2. Minor crossroads that extend outside the required right of way should be labeled as to their function, such as dirt logging road, field road, gravel drive, etc.

3. Identify and label all intersecting waterways along the project corridor, providing names when available.

F. Land Use

1. Identify adjacent land use such as cultivated, pasture, wooded, timber, etc.

2. In urban and/or commercially developed areas, it is especially significant to identify parking and access.

3. Special use properties, (e.g., parks, institutions, airports, etc.), should be clearly identified.

4. City or municipal limits should be clearly delineated and labeled.

G. Monumentation

1. A reasonable effort should be made to locate and tie with coordinates or traverse from a known control (i.e., project control line) a monument such as a section corner, 1/4 section corner, etc.

2. Special attention should be paid to any monuments, iron pins or other property corner markers, natural boundaries such as tree lines or creeks, and man-made boundaries such as fence lines or rock walls, as they relate to establishing accurate property lines.

3. Additional markers are helpful, such as back property monuments, row markers, etc.

4. All monuments should be described in the plans, such as “found iron pin”, “capped”, etc. These monuments are sometimes referenced in the source deeds and are helpful in establishing an accurate property map.

5. Locate and identify all existing Right-of-Way markers on the ground. If they do not exist, refer to as-built plans or archived Right-of-Way maps. Plot the existing roadway centerline on the proposed plans and establish existing markers using stations and offsets from the existing control line.

H. Boundary Lines

1. The term "Boundary Lines" refers to all man-made lines such as township, range, section, property and easement.

2. All section corners should be tied to an identifiable, recoverable monument.

3. 1/4 section lines should be tied when possible, especially if they are used to establish property lines of affected tracts.

4. 1/4 section lines that are not tied, but rather "gridded" on the plans are to be used for visual reference only, and not for computational purposes or as commencing points in legal descriptions. The plans should clearly differentiate the "gridded" lines from those that were tied to a known monument by the survey.

5. Liberal use of property line and land hook symbols should be used throughout the plans to clearly delineate property lines.

6. Ownership names should be clearly labeled for all properties.

7. All existing easements should be clearly delineated and defined.

8. In summary, the following boundary lines, symbols and labels should be shown:

    - Township & Range Lines
    - Section Lines
    - Section Corners
    - ¼ Section Lines
    - ¼-¼ Section Lines
    - Present Right of Way Lines
    - Property Lines
    - Property Line Symbols
    - Land Hook Symbols
    - Ownerships

- Easements

I. Total Property Considerations

1. The total periphery of affected tracts shall be shown on the Right-of-Way plans, when practicable.

2. When encountering large properties, a decision must be made as to whether it is feasible to plot the total property and all of its improvements. For example, timber companies, power companies, railroads properties, etc. tend to have extremely large areas of land often acquired over time by means of several source deeds. It can be very difficult to show the boundary of all contiguous properties accurately. In these cases, it is probably best to use the source deed(s) for the before acreage. In most cases, this is sufficient because ALDOT will acquire relatively small parcels and the impact to per-unit value of the remainder is minimal. In some cases, a before acreage may not be available, nor necessary for this reason.

3. The Division Right-of-Way Engineer shall decide if the total periphery of a property can be omitted.

J. Updating Surveys

Why and what needs updating?

III. Design of R/W Limits

A. General

1. The Right-of-Way to be acquired for highway construction and maintenance shall be referred to and labeled as “Proposed” Right-of-Way (Proposed R/W).

2. Well-designed Right-of-Way limits provide sufficient buffers for construction and maintenance of roadways and, if practicable, minimize the impact on adjacent properties.

3. The proposed Right-of-Way file (row.dgn) is actually a product of the design phase of a project. It is generated after many of the design computations have been completed and the limits of construction have been determined.

4. The proposed Right-of-Way and easement limits shall be identical on the Right-of-Way and contract plans.

5. The following guidelines are presented to assist in the correct placement and labeling of the proposed Right-of-Way limits and it’s associated components.

B. Geometry and Layout

1. Limits shall be tangent or circular.

2. Circular limits shall be concentric to the control line.

3. Spiral curves shall not be used.

4. Proposed Right-of-Way limits should be

C. Buffers

1. When setting required right of way limits, liberal buffer areas should be designed between the construction limits and proposed Right-of-Way line to allow sufficient space for construction and maintenance equipment and storing construction materials.

2. In non-developed areas, buffers should average about twenty-five feet (25') but can be up to fifty feet (50') in rugged terrain where deep cuts and/or fills are anticipated.

3. A wider buffer area may be needed to accommodate special ditches or other drainage requirements. Drainage design and flattening of slopes are probably the most common causes of having to adjust the proposed Right-of-Way lines after right of way acquisition is in progress.

4. In developed areas, especially commercial districts, the buffer may need to be kept to a minimum. Temporary easements can be used in these areas to allow room for construction. The buffer then only needs to be wide enough to allow for maintenance and (unless it is a denied access project) utility relocations. Through these areas, generally, the buffer should be wide enough to maintain drainage; sidewalk areas, sight distances and roadside hazard clear zones. If at all possible, a minimum ten to fifteen foot (10' - 15') buffer outside the construction limits is recommended.

5. A minimum of fifteen to twenty-five feet (15' – 25') is recommended where utility relocations are involved.

6. In order to keep the number of Right-of-Way revisions to a minimum, and maintain lines that are uniform, there may be areas where the buffer will be wider than recommended. This is more preferable than having areas where the buffer is too narrow.

7. The buffer offsets recommended in this document are guidelines; some sites will require larger buffers, others will require less.

D. Placing Markers

1. Symbols used to represent proposed Right-of-Way markers within the right of way plans should comply with ALDOT's Right-of-Way plans legend.

2. A marker shall be placed along the proposed Right-of-Way line and proposed Permanent Drainage Easements (PDE's) at each of the following locations:

- P.C. - points of curvature
- P.T. - points of tangency
- Flares - angular breaks
- Termini – ties to existing Right-of-Way

3. When practical, the length of flares should be kept to a minimum, with the deflection angle no greater than 90 degrees.

4. It is preferable to design uniform Right-of-Way limits so that proposed Right-of-Way markers can be kept to a minimum.

5. P.C. and P.T. stations along the proposed Right-of-Way line or PDE are determined by the P.C. and P.T. stations of the project's centerline, or control line, and may often be shown to a decimal precision two (2) for imperial units or three (3) for metric units.

6. Markers at the termini of the proposed Right-of-Way or PDE (where they tie to the existing Right-of-Way) may be shown to a decimal precision of two (2) for imperial units or three (3) for metric units.

7. Wherever practical, angular breaks, or transitions, should be adjusted so that the markers are placed on stations and offsets rounded to the nearest foot or meter, preferably at stations evenly divisible by 10 and offsets evenly divisible by 5.

8. Markers shall not be placed at the intersection of property lines, except in the rare case where ALDOT prefers to defer an acquisition to an adjacent project scheduled for a later date. See example:

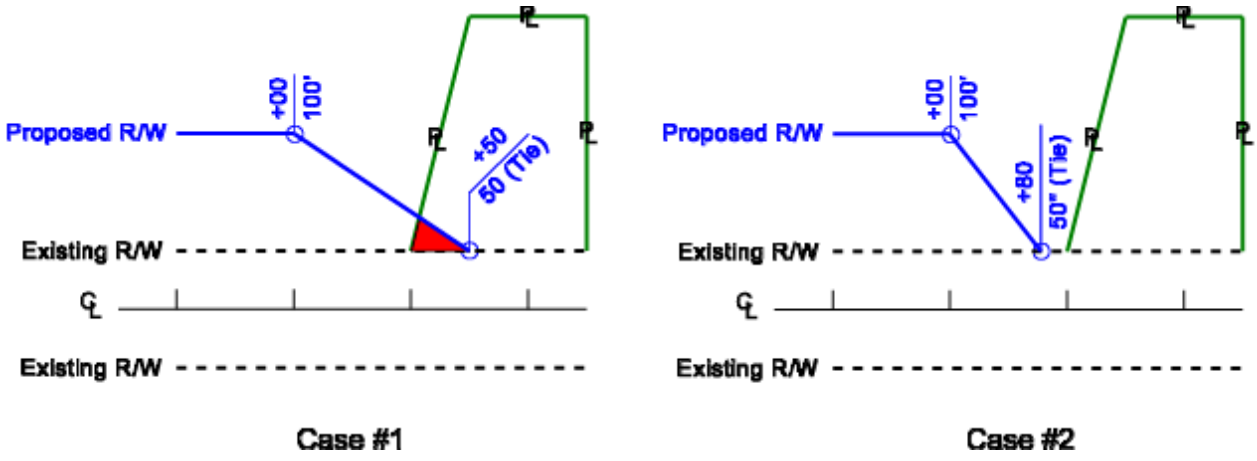
Insert illustration

9. If the terminus of the proposed Right-of-Way line or PDE appears close to a property line, move the tie ahead or back of the property line to avoid the appearance of tying to the property line.

10. Markers shall not be placed along Temporary Construction Easements (TCE's).

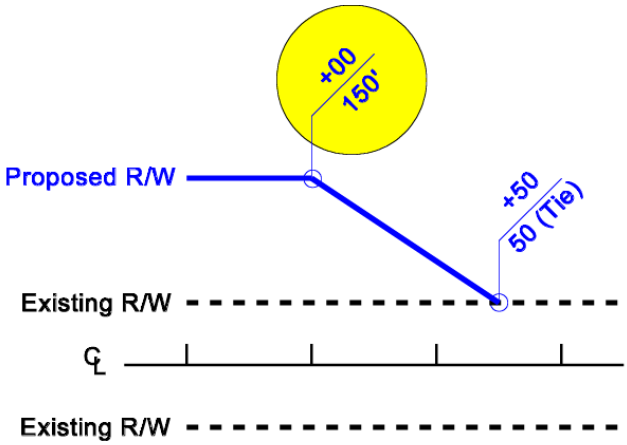
11. When possible, it is preferable to avoid extremely small Right-of-Way takings. Narrow slivers of Right-of-Way can be sometimes be avoided by slight adjustments to the offset of the proposed Right-of-Way limits

12. Avoid ties to existing Right-of-Way that create small triangular parcels. In the illustrations below, notice that in Case #1 the proposed Right-of-Way ties in a way that creates a small triangular parcel (shown in red). This is undesirable. The preferred method is illustrated in Case #2. The proposed Right-of-Way tie point has been moved back so that it does not impact the tract (outlined in green).



E. Labeling R-O-W markers

1. In general, markers should be referenced from the primary control line. Refer to the yellow bubble in the illustration shown below. The label should indicate a station above the leader line and an offset below the leader line.



2. The station indicates the markers position along the project centerline.

3. The offset indicates the perpendicular distance from the project centerline.

4. No station value shall be shown to the left of the plus (+) sign.

5. Do not label offset distances as being “left” or “right” of the project centerline.

6. All offset distances shall be shown as positive values; no negative offsets shall be shown.

7. If acquiring Right-of-Way from an existing side road, the marker should be referenced from the respective control line.

8. On occasion when the project has more than one mainline control line, special care should be taken to reference markers consistently from the same control line.

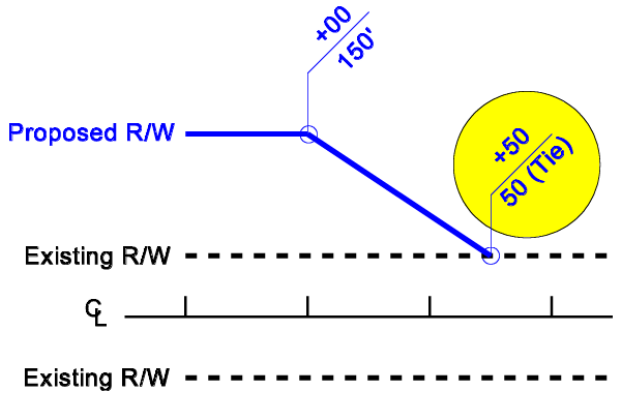
9. Although temporary easements do not have Right-of-Way markers, the same labeling conventions for station and offset shall be used.

F. Ties to Existing Boundaries

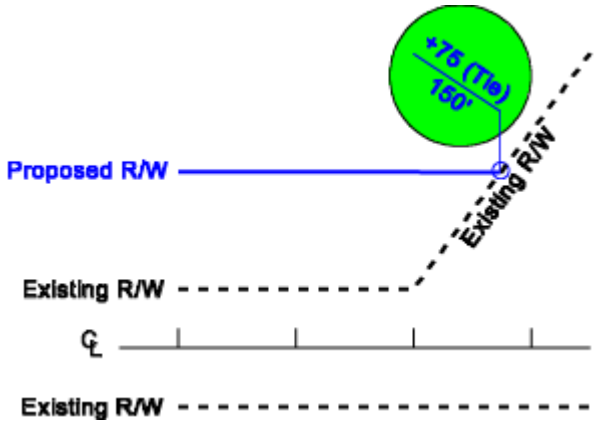
1. Where the proposed Right-of-Way terminates and ties to the existing Right-of-Way, there are two prevailing methods for labeling the station and offset.

2. The first method is used when the station is fixed or held constant. Refer to the yellow bubble in the illustration shown below. The “plus or minus” (+/-) label indicates that the offset distance is variable and can float in order to tie to the existing Right-of-Way. The offset of 50’ feet is informative only, while the station +50 is controlling.

Modify illustration from (Tie) to (+/-).



3. The second method is used when the offset is fixed or held constant. Refer to the green bubble in the illustration shown below. Notice that the existing Right-of-Way flares upward, while the proposed Right-of-Way is parallel to the project centerline. The “plus or minus” (+/-) label indicates that the station is variable and can float in order to tie to the existing Right-of-Way. The station +75 is informative only, while the offset of 150’ is controlling.



4. The above methods will also apply in the rare instance when the proposed Right-of-Way ties to an existing property line. This type of tie is typically done at the beginning or end of a project.

IV. Plan Assembly

A. General Format

1. Right-of-way plans shall be formatted to fit on B-size (11” x 17”) sheets and attached by staples, fasteners, or other means in the left-hand margin.

2. B-size sheets shall serve as the record copy.

3. CAD files shall be organized so that a roll map can be produced for public involvement meetings, if needed.

4. Text sizes shall be large enough to be easily read on 11” x 17” sheets. Minimum text sizes shall comply with the CAD standards.

5. Standard plan sheet borders and MS Excel templates shall be provided by ALDOT.

6. The right-of-way plan assembly shall be comprised of the following sheet types and in the order presented below:

    a) Title
    b) Index to Sheets
    c) Revisions
    d) Tract Summary
    e) Project Overview
    f) Plan Detail Sheet

B. Title

1. The "Title" sheet shall be the first sheet in the assembly and shall display the following information:

a) Sheet #	f) County
b) Last Sheet #	g) Vicinity Map
c) FA Project #	h) Index to Project
d) CPMS Project #	i) Legend & Abbreviations
e) Project Description	j) Revision # & Date

Click here to see a sample title sheet. The letters above correspond to items on the sample illustration.

2. In this block, show all contact information for the party responsible for preparing the map.

3. The sheet number shall be numbered "1" and is located in the Project ID block found in the upper right corner of the sheet. The last sheet number is also located here and indicates the last or final sheet of this plan set.

4. The FA and CPMS Project Numbers, Description, County & Scope of Work shall be linked from the standard MS Excel workbook provided by ALDOT.

5. CPMS project numbers shall be provided to the consultant by ALDOT.

6. The vicinity map shall be referenced and clipped from a county map provided by ALDOT.

7. Begin and End Project limits shall be clearly delineated within the vicinity map using arrows. Stations shall not be shown

8. The "Index to Projects" shall locate the division and county within the state border. This index is found in the upper left corner of the sheet.

9. All lines, lettering, signs and symbols shall be in accordance with the "Legend & Abbreviations" shown on the right hand side of the sheet.

10. The last revision number and date for the plan set shall be noted in the bottom right corner of this sheet.

C. Index to Sheets

1. The "Index to Sheets" sheet shall provide a list of sheet descriptions and their accompanying plan sheet number.

2. This sheet shall be numbered "2" for a single sheet. If multiple sheets are required, these sheets shall be numbered using a "2-1, 2-2, 2-3…" series.

3. The "Index to Sheets" is in Microsoft Excel format and is included as a worksheet within the Project_Tracts.xls workbook provided by ALDOT. The sheet is designed to print on 11"x17" paper to be inserted directly into the Right-of-Way plan set.

4. The page title and sheet number are both built into the worksheet page header and do not have to be typed in.

Click here for sample Index Sheet

D. Revisions

1. The "Revisions" sheet serves notifies users that a change has been made to the Right-of-Way plans and provides an historical record of all changes made during the life of the project. For detailed instructions on revision entries, refer to the “Plans Changes” section.

2. This sheet shall be numbered "3" for a single sheet. If multiple sheets are required, these sheets shall be numbered using a "3-1, 3-2, 3-3…" series. A standard MS Excel workbook template will be provided by ALDOT.

3. This sheet contains the following information:

   - Revision Number
   - Revision Date
   - Sheet Number
   - Tract Number
   - Description
   - Made By

4. The "Revision Number" column lists unique numbers and can refer to a single revision or a group of revisions made on a specific date.

5. The "Revision Date" column contains the date on which the revision(s) were made.

6. The "Sheet Number" column indicates the "ROW Plan Sheet" affected by the revision.

7. The "Tract Number" column indicates the tract, if any, affected by the accompanying revision(s). If the revision(s) are not specific to a particular tract, an "N/A" shall be sufficient.

8. The "Description" column provides details as to what type of revision was made. This information should be specific enough to describe both the graphical changes and the computational changes, if applicable.

9. The "Made By" column indicates the initials of the author of the accompanying revision.

Click here for sample Revision Sheet

E. Tract Summary

1. The "Tract Summary" sheet shall contain a table of all pertinent information related to each tract of a project. For more detailed information about content, refer to the “Tract Summary” sub-section under the “Area Computations” section.

2. This sheet shall be numbered "4" for a single sheet. If multiple sheets are required, these sheets shall be numbered using a "4-1, 4-2, 4-3…" series. A standard MS Excel workbook template will be provided by ALDOT.

3. Formulas are built into the Tract Summary sheet to perform calculations. The page title and sheet number are built into the worksheet page header and do not have to be typed in to display on the printed sheet.

4. The "Tract Summary" sheet is designed to print on an 11"x17" sheet to be inserted directly into the right of way plan assembly.

5. The only items from this table that will be displayed in the "ROW Plan Sheet" are the tract numbers and property owners.

Click here for sample Tract Summary Sheet

F. Project Overview

1. The "Project Overview" sheet shall provide a "birds-eye" view of the project so that tracts can be quickly identified and located on the relevant “Plan Detail” sheet.

2. This sheet shall be numbered "5" for a single sheet. If multiple sheets are required, these sheets shall be numbered using a "5-1, 5-2, 5-3…" series.

3. This sheet shall contain the following information:

- Project Control Lines
- Tract Boundaries (Property Lines)
- Tract Identification Numbers
- "ROW Plan Sheet" Borders

Click here for sample Project Overview Sheet

G. Plan Detail Sheet

1. The "Plan Detail Sheet" shall provide a detailed drawing of the project and the proposed "takings".

2. This sheet shall be numbered "6" for a single sheet. If multiple sheets are required, these sheets shall be numbered using a "6-1, 6-2, 6-3…" series.

3. In the case of multiple sheets, a match line shall be used to separate abutting sheets.

4. This sheet shall contain the following:

- North Arrow with Section, Township Annotations
- Project Centerlines, Annotations & Geometric Data
- Curve Data

- Existing Topography
- Names of Intersecting Roads & Streets
- Present Right-of-way
- Existing Property Lines
- Property Ownership
- Structure Identification Labels
- Tract Identification Numbers
- Required Right-of-way
- Required Easements
- Parcel, Easement & Remainder Bubbles
- Total Property Insets (As needed)

5. Construction details should not be shown on the Plan Detail sheets.

Click here for sample Detail Sheet

H. Insets

1. If the total periphery of a tract is too large to fit on a sheet, an inset will be required.

2. Insets may be required on the Project Overview sheet, Plan Detail sheet, and/or Property Sketches.

3. A border shall be placed around the inset with the tract number and inset scale labeled as shown:

(Show inset here)

4. A separate “Insets” Sheet can be used if deemed necessary by the Division Right-of-Way engineer.

I. Sheet Scales

1. Scales shall be used that allow the most coverage of the project area without compromising the ability to read project details.

2. The table shown lists commonly used scales for B-size sheets:

Sheet/Figure	Imperial	Metric
Title (vicinity map)	1” = 2 mi	1: 120 000
Project Overview	1”= 600’	1: 6000
Plan Detail	1”= 100’, 1”=200’	1:1000, 1:2000
Property Sketches	Define as needed	Define as needed
Insets	Define as needed	Define as needed

3. The table shown is only a guide; the selected scale must be approved by ALDOT.

4. Scales shall be indicated using a bar scale. Do not label the scale.

V. Labels & Terminology

A. Property Segments

1. The Right-of-Way acquisition process necessitates that properties be sub-divided and clearly delineated. This allows for separate area calculations that are used for the purpose of property appraisal and conveyance.

2. Property segments defined by ALDOT include the following:

   - Tract
   - Parcel
   - Permanent Easement
   - Temporary Easement
   - Uneconomic Remnant
   - Excess Taking
   - Excess Right-of-Way
   - Remainder

B. Right-of-Way

1. The Right-of-Way to be acquired for highway construction and maintenance shall be referred to and labeled as “Required” Right-of-Way (Req’d R/W).

2. Present or existing Right-of-Way shall be labeled “Present” Right-of-Way (Present R/W).

C. North Arrow

1. North Arrows shall be shown in all of the following locations throughout the plan assembly:

   - Title Sheet Vicinity Map
   - Project Overview Sheet
   - Plan Detail Sheet
   - Total Property Insets
   - Property Sketches

2. For Plan Detail Sheets and Tract Sketches, the north arrow shall serve a dual purpose. In addition to indicating direction, it shall identify the section and township within which it lies. Refer to the illustration shown below. The section is labeled on the west side of the arrow, while the township is labeled on the east side of the arrow.

D. Tract

1. A Tract is defined as the total periphery of a property associated with a unique ownership.

2. A tract number shall be assigned to a property only if ALDOT intends to acquire all or a portion for highway construction purposes.

3. Tract numbers provide a quick, easy method of locating and identifying properties in a set of Right-of-Way plans. Also, correspondence and other reports related to appraisal and acquisition reference these tract numbers.

4. The ownership of a property may change prior to acquisition, but the tract number remains the same.

5. A Tract is not always contiguous. Notice that tract # 3 is comprised of two (2) non-contiguous pieces of property because they belong to the same owner. If however, it is determined that these each of these property segments require separate appraisals, it is appropriate to give each segment a unique tract number.

6. Tracts are numbered beginning with the number one (1) at the beginning of the project and numbered sequentially until the end of project. Note that there are six (6) tracts identified along the project shown in the illustration below.

7. In the event a numbered tract is determined to be no longer necessary (i.e., due to a change in the design), that tract is deleted. The tract number shall be labeled as "*Deleted"* and **shall not** be assigned to another tract. See tract # 6 in the illustration below.

8. Tracts shall not be re-numbered after any associated project correspondence or reports have been generated.

9. Properties plotted from separate source deeds that indicate the same property owner shall be assigned a single tract number. Two, distinct property segments described in separate deeds (or tax map ID numbers) shall be "tied" together with a land hook symbol and treated as a single tract. Refer to tract # 5 below.

E. Parcel

1. A Parcel is a property segment to be acquired by ALDOT as permanent Right-of-Way.

2. The proposed Right-of-Way limits define the location and extent of each parcel.

3. Each parcel is wholly contained within its parent tract.

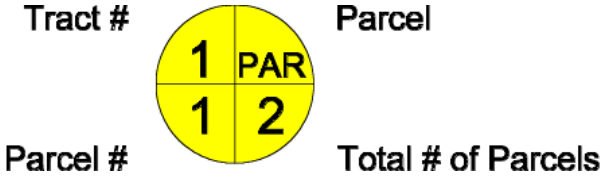
4. A tract can contain one or more parcels.

5. Within each tract, parcels are numbered beginning with the number one (1) and incremented by one (1).

6. A tract may contain more than one "Parcel". Note that Tract # 3 contains two (2) separate parcels, referred to as Parcel #1 of 2 and Parcel #2 of 2.

7. In the illustration below, note that the parcel (shown in red) is that part of the tract that falls within the boundary of the proposed Right-of-Way.

8. This property symbol is interpreted as “Tract 1, Parcel 1 of 2”.



9. When space permits, the property symbol shall be placed within the boundary of the parcel. Otherwise, a leader line with a circle terminator shall be used.

F. Easement

1. An easement is the legal right granted to ALDOT to cross or use part of a property.

2. Easements acquired by ALDOT are typically classified as "temporary" or "permanent".

3. Easements are further defined as “construction” or “drainage”.

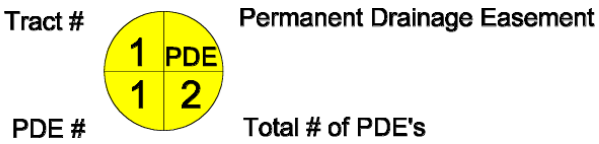
4. When ALDOT obtains a temporary easement from a property owner, the rights to that land usually revert back to the property owner at the end of the project or at the end of a given length of time.

5. Permanent easements, as the name implies, grants ALDOT continued access and use of the property. An easement on which ALDOT constructs and continues to maintain a drainage structure would be an example of a permanent easement.

6. A tract may contain one or more easements.

7. For each tract, easements should be numbered, beginning with the number one (1) and incremented by one (1).

8. The "Pie Symbol" should be used to identify the easement as follows:



9. Other easements used are Temporary Drainage Easements (TDE) and Temporary Construction Easements (TCE).

10. When space permits, the pie symbol should be placed within the boundary of the easement. Otherwise, a leader line with a circle terminator should be used.

11. Acreage for Permanent Easements shall not be subtracted from the Before area.

G. Remainder

1. The part or parts of a tract that are left after the acquisition of one or more parcels are known as remainders.

2. The area of a remainder falls outside the proposed Right-of-Way.

3. Easements are considered a part of the remainder.

4. Within a given tract, each non-contiguous remainder shall be assigned a unique letter designation, beginning with the letter "A" and advancing alphabetically.

5. The symbol used to identify a remainder shall be a hexagon (six-sided polygon).

6. The information within the symbol should identify the remainder as follows:

Place symbol here.

7. When space permits, the remainder symbol should be placed within the boundary of the remainder. Otherwise, a leader line with a circle terminator should be used.

H. Excess Properties

1. Excess properties are those property segments purchased by ALDOT for reasons other than highway construction and maintenance.

2. The three (3) types of Excess Properties are:

   - Uneconomic Remnants
   - Excess Takings
   - Excess Right-of-Way

3. These special types of property segments must be clearly delineated, labeled, and measured for area so that they are properly maintained and disposed of at a later date.

4. The State Right-of-Way Engineer or Division Right-of-Way Engineer shall determine which properties are to be designated as Excess Properties.

I. Uneconomic Remnants

1. An Uneconomic Remnant is a remaining part of a property that has little or no utility or value to the owner.

2. Uneconomic Remnants purchased by ALDOT shall be clearly labeled and delineated on the plans. Otherwise, they are treated just like any other remainder.

3. The Division Right-of-Way Engineer shall designate those remainders that will be labeled as Uneconomic Remnants.

4. Within each tract, Uneconomic Remnants shall be numbered, beginning with the number one (1) and incremented by one (1).

5. The information within the symbol should identify the UR as follows:

Insert Symbol

6. When space permits, the UR symbol should be placed within the boundary of the UR. Otherwise, a leader line with a circle terminator should be used.

7. Excess properties shall be considered part of the Acquired area.

J. Excess Taking

1. An Excess Taking is a remnant acquired without Federal participation.

2. Excess Takings shall be clearly labeled and delineated on the plans.

3. Within each tract, Excess Takings shall be numbered, beginning with the number one (1) and incremented by one (1).

4. The information within the symbol should identify the Excess Taking as follows:

Insert Symbol

5. When space permits, the Excess Taking symbol should be placed within its boundaries. Otherwise, a leader line with a circle terminator should be used.

6. Excess Takings shall be considered part of the Acquired area.

K. Excess Right-of-Way

1. Excess Right-of-Way is property acquired as Right-of-Way, but due to design changes during or after construction, is no longer included in the approved Right-of-Way limits of the transportation facility.

2. Excess Right-of-Way shall be clearly labeled and delineated on the plans. For details, refer to the “Closed Tracts” sub-section.

L. Closed Tracts

1. A tract that has been negotiated with and purchased from a property owner is considered “closed”.

2. Although highly undesirable, occasionally it becomes necessary to negotiate with a property owner of a “closed” tract. For example, after Right-of-Way has been purchased from a property owner, a subsequent change in the design may require additional property from the same owner. Conversely, a segment of the acquired Right-of-Way may later be determined unnecessary and designated as Excess Right-of-Way.

3. When additional Right-of-Way is required:

   - The remainder of the original tract shall become a new, autonomous tract and be assigned a unique tract number.
   - Within the original tract, the parcel and its accompanying label shall be left intact.
   - Within the new tract, the parcels shall be numbered beginning with number one (1) and incremented by one (1).

4. When Right-of-Way is determined to be unnecessary (Excess Right-of-Way):

   - Within the original tract, the parcel and its accompanying label shall be left intact.
   - Within the new tract, the Excess Rights-of-Way shall be numbered beginning with number one (1) and incremented by one (1).
   - The information within the symbol should identify the Excess Right-of-Way as follows:

Insert Symbol

   - When space permits, the Excess Right-of-Way symbol should be placed within its boundaries. Otherwise, a leader line with a circle terminator should be used.
   - Excess Right-of-Way shall not be shown on the Tract Summary Sheet.

M. Structures

1. All structures within a tract shall be labeled.

2. Each structure should be assigned a letter, beginning with the letter "A" and advancing alphabetically.

3. The letter shall be placed in a triangular shaped symbol as shown below:

Insert symbol here.

4. In the case of very large tracts, label structures in such a way that the letters increase alphabetically in the same direction that the stations increase numerically.

5. Structures to be removed prior to or during construction shall be identified as follows:

   - Labeled in the contract plans on the appropriate plan sheets
   - Summary of quantities box sheets (“Removal of Structures” box)
   - All related correspondence

6. Structures to be removed shall be labeled on the contract plans using a combination of the tract number and the structure letter, separated by a hyphen.

Example: Tract #23, Structure “B”, shall also be identified as structure #23-B if it is to be removed.

N. Multiple Projects

1. Occasionally, a set of Right-of-Way plans may contain more than one source of project funding. For example, a road improvement project and a bridge replacement project may be grouped into a single contract and shown on the same plans. A station number delineates the limits of these projects on the Right-of-Way plans.

2. These project limits typically do not conveniently fall between tracts, but somewhere within the area of a single tract. When this is the case, it is preferable to assign the tract wholly within one (1) project number, even though the tract is geographically located within both project limits. This is done so that all calculations can be shown under one project.

3. On extremely large tracts, it may not be possible to assign the tract to a single project due to funding issues. A dividing line must be drawn at a perpendicular from the project centerline in order to group parcels (and easements) in their respective project funding source.

4. The Tract Summary worksheet provides a row labeled "Other" which can be used to make the distinction between projects for any given tract.

Show example illustration/worksheet.

5. The Division Right-of-Way Engineer shall decide how to handle tracts under these conditions.

VI. Area Computations

A. Units of Measure

1. As of 8/1/02, all surveys, plans, and deeds developed by, or for, ALDOT shall be in Imperial units. The area of property segments shall be expressed as acres (ac).

2. For projects containing highly valued property, the area of property segments may additionally be expressed as square feet (sf). This will be at the discretion of the Division Right-of-Way engineer.

3. For plans already under development using Metric units, areas shall continue to be expressed as hectares (ha).

B. Before

1. The area within the periphery of a tract shall be referred to as the ***Before*** area. This is the area ***Before*** any property is acquired by ALDOT.

2. Within a given tract, the sum total of the areas of all parcels and remainders shall be equivalent to the ***Before*** area.

C. Source

1. The source of the ***Before*** area shall be defined as ***Deed*** or ***Calculated***.

2. The source shall be defined as ***Deed*** if the area is derived or estimated from a tax map, sub-division plat, source deed, or any combination thereof.

3. The source shall be defined as ***Calculated*** if the area is calculated using the boundary lines shown on the Right-of-Way plans.

4. The preferred source shall be ***Deed***, except for those cases where the source deed is believed to be in error or there is a significant difference between the area indicated on the deed and the area calculated from the plans.

D. Required

1. The sum total of all parcels within a tract shall be referred to as the Required area.

2. The area of each parcel shall be calculated individually and labeled on the Tract Summary Sheet.

E. Remainder

1. Within a given tract, the Remainder shall be the difference between the Before area and the Acquired area. This is the area that remains after ALDOT acquires property for highway construction.

2. The area of each non-contiguous remainder shall be calculated individually and labeled in the Tract Summary Sheet.

3. Easements shall be considered a part of the Remainder.

F. Tract Summary

1. The Tract Summary Sheet template provided by ALDOT shall be used for all calculations. Refer to the attached figure for an explanation for each record. Note that the cells in red are user-defined, while the cells in black are pre-defined formulas.

Row #	Row Label	Tract Data	Cell Type	Explanatory Notes
2	**Tract**	**1**	Header	This is tract number 1.
3	Plan Sheet #	6-1	Key-in	This is the plan detail sheet number. If the tract spans multiple sheets, list each sheet separated by a comma.
4	Owner	John Doe	Key-in	The owner of tract # 1.
5	DB/PG	30/225	Key-in	The deed book and page number of the source deed.
6	Subdivision	n/a	Key-in	The subdivision name, if applicable.
7	Lot/Block	n/a	Key-in	The subdivision lot & block numbers, if applicable.
8	MB/PG	n/a	Key-in	The subdivision plat book & page numbers, if

				applicable.
9	Deed or Calc.	Deed	Key-in	This source of the Before area was derived from the deed.
10	**Before**	**22.000**	Key-in	
11	**Acquired**	**4.500**	Formula	= R17 (R17 means row number 17)
12	**Remainder**	**17.500**	Formula	= R22
13	**Part Acquired**			
14	Parcel 1	3.200	Key-in	
15	Parcel 2	1.300	Key-in	
16	Parcel 3			
17	**Total Parcels**	**4.500**	Formula	= R14 + R15 + R16
18	**Remainders**			
19	Remainder "A"	9.400	Formula	= R22 – (R20 + R21)
20	Remainder "B"	8.100	Key-in	
21	Remainder "C"	0.000	Key-in	
22	**Total Remainder**	**17.500**	Formula	= R10 – R11
23	**TCE**			
24	TCE #1	0.150	Key-in	
25	TCE #2	0.000	Key-in	
26	TCE #3	0.000	Key-in	
27	**Total TCE**	**0.150**	Formula	= R24 + R25 + R26
28	**TDE**			
29	TDE #1	0.250	Key-in	
30	TDE #2			
31	TDE #3			
32	**Total TDE**	**0.250**	Formula	= R29 + R30 + R31
33	**PDE**			
34	PDE #1	0.300	Key-in	
35	PDE #2			
36	PDE #3			
37	**Total PDE**	**0.300**	Formula	= R34 + R35 + R36
38	DB/PG	55/125	Key-in	The book & page of the recorded acquisition deed.
39	How Acquired	Negotiated	Key-in	Negotiated or Condemned.

2. Remainder “A” shall be calculated by the pre-defined formula in the table summary. This is to ensure that the sum of the Acquired and Remainder areas equal the Before area.

Need to add column for square feet.

VII. Acquisition Deeds

A. General

1. A Deed is an instrument consisting of two (2) documents, a Deed Form and a Property Sketch.

2. References to Deeds shall imply an attached Property Sketch.

B. Deed Forms

The following Deed Forms are used for conveyance by ALDOT:

- Fee Simple
- Permanent Easement
- Temporary Easement
- Quitclaim
- Acknowledgements

C. Fee Simple

D. Permanent Easement

Contaminated Property
Timber Rights clause ?

E. Temporary Easement

F. Quitclaim

Uneconomic Remnant
Excess Right-of-Way

G. Acknowledgement

Consolidate?

H. Disclaimer

The following disclaimer shall be placed on the Title Sheet and as a clause on the Deed Form.

"This document is to be used by ALDOT for the purpose of acquiring properties for transportation purposes. ALDOT does not perform boundary surveys and is not responsible for property boundary disputes. Existing boundary lines are indicated as accurately as possible, with consideration for the limitations of tax maps, source deeds, monumentation, and other available data. The intent described herein shall supersede all plan measurements and computations."

VIII. Property Plat

A. General

1. Property Plats shall be prepared for each tract.

2. Property Plats shall be attached to the respective Deed Form and considered a part of the Deed.

B. Formatting

1. Property Sketches shall be prepared on legal size (8 ½" x 14") sheets, using MS Word templates provided by ALDOT.

2. Each Property Plat sheet shall consist of two (2) main sections, the Sketch and the Summary.

3. In some cases, sketches may require multiple plats.

4. Match lines shall be used for property segments that require more than one plat.

C. Sketch

1. The property segment being described shall define the scale and size of the sketch.

2. When practical, an Inset shall be used to show the total periphery of the tract. If there is a lack of space on the plat number 1, the inset can be placed on a separate plat.

3. The total periphery shall indicate the location of the parcel with the use of shading.

4. The following list defines the minimum required information on the sketch portion of the plat:

   - Roadway Centerline
   - North Arrow
   - Point of Commencement
   - Point of Beginning
   - Course or Leg Numbers
   - Metes Table
   - Bar Scale
   - Inset
   - Match Line (if applicable)

D. Summary

The Summary portion of the plat shall contain the following:

- County
- FA Project #
- CPMS #
- Tract #
- Owner
- Before
- Acquired
- Remainder
- Rev Date
- Sketch 1 of 1

E. Example

Insert sample Plat

IX. Deed Form

Each Deed Form consists of the following parts:

- Deed Preparer
- Revision Date
- Header
- Introduction
- Property Description
- Closing
- Acknowledgement
- Deed 1 of 1

Insert Example

X. Property Description

A. Intent

It is ALDOT's intent to describe acquired property as accurately as possible, but with consideration for the limitations of tax maps, source deeds, monumentation, plan measurements and computations, and other available data.

B. Types

1. Metes and Bounds

   This measurement system defines the angle and distance along the path between two (2) points.

2. Lot and Block

   The modern day version of the lot and block system is the subdivision. In this system, a survey is done and a larger tract of land is divided into smaller parcels to be drawn up on a map or plat. The plat is created and recorded, and subsequent descriptions refer to the recorded plat by lot number (and blocks, if applicable).

3. Centerline

C. Parts

A property description generally has four parts, each of which serves a specific purpose.

- Caption
- Body
- Qualifying Statements
- Conclusion

D. Caption

1. The caption establishes the following:

   - That ALDOT maintains a copy of the Right-of-Way plans and deeds
   - The ALDOT project number
   - The ALDOT tract number
   - The county or counties in which the tract lies
   - The Office of Judge of Probate in which the plans and deed are recorded
   - The quarter-quarter, section and township in which the tract lies

2. The caption establishes the general location or neighborhood in which the parcel is located and works as a filter for the rest of the description. Special attention should be paid when preparing the caption, since any information in the balance of the description, which does not meet the criteria described in the caption, shall be considered void. In situations where the intent is not clear or there is a discrepancy between the caption and the body of the description, the information in the caption holds priority. The following is an example of a caption:

   "As shown on the Right-of-Way plans of Project No. APD-471(514) of record in the Alabama Department of Transportation, a copy of which is also deposited in the office of the Judge of Probate of Jefferson County, Alabama, as an aid to persons and entities interested therein and as shown on the Property Plat attached hereto and made a part hereof:

   A part of the NW ¼ of the NE ¼, Section 5, T-14-S, R-8-W identified as Tract No. 2 and being more fully described as follows:"

E. Body

This is where the actual description details are given. The language used within the body is the basic tool for expressing intent.

F. Format

1. The traverse between the POC and POB and along the periphery of a property is described by a series of connecting courses or legs. A "course", as it relates to property descriptions, is the path between two points.

2. Each course contains two (2) sets of calls, a "metes" (measurements) and "bounds" (boundary lines).

3. Each course shall be shown as a separate paragraph.

4. ALDOT property descriptions shall contain a combination of both types of calls for each course described.

G. Point of Commencement

1. Descriptions for parcels and permanent easements shall contain a point of commencement (POC).

2. The POC is a described, recoverable, point of reference found in the general area of the property being described.

3. The POC shall not lie within the boundary of the property being described.

4. The POC shall be located outside of the Required Right-of-Way, when possible.

5. The preferred location for a POC is a Government corner, such as a Section Corner monument, or quarter section corner monument. Another acceptable POC would be a lot corner from a nearby-recorded subdivision, preferably marked with an iron pin or other type of monument. In cases where no government corners are located and no recorded subdivisions exist, an iron pin referenced in a source deed of a nearby property owner may be used as long as the recording data (deed book and page of the source deed) are referenced. Also, existing right of way monuments may be used when other sources are not available.

6. POC's are listed below in the order of preference:

    a) Section Corner
    b) Quarter-section corner
    c) Subdivision Lot Corner
    d) Property Corner
    e) Existing Right-of-Way Marker
    f) Required Right-of-Way marker

7. A Point of Commencement is not necessary when describing a Temporary Easement, since there is no need to re-establish the boundary of the easement upon completion of the construction of the project.

H. From POC to POB

1. Traversing the path between the Point of Commencement and the Point of Beginning can be accomplished in a number of ways. There does not appear to be any right or wrong method, yet some methods are preferable under certain conditions. The following text is only a guideline. Professional judgment shall be applied for each site.

2. It is preferable to traverse, as nearly as possible, the same path as shown in the source deed. Traversing the same path as the source deed helps retain the chain of title. If the source deed is unavailable or unclear, use the guidelines in the following table:

POC	Traverse
Government corner	For new construction, traverse a path along government lines to the Roadway Centerline, and then follow the Roadway Centerline until intersection with parcel.
Government corner	For existing roadways, traverse a path along government lines until it intersects a Required or existing Right-of-Way line, and then follow until intersection with parcel.
Subdivision	Follow lot line until it intersects a Required or existing Right-of-Way line, and then

Lot Corner	follow until intersection with parcel.
Property Corner	Follow property line until it intersects a Required or existing Right-of-Way line, and then follow until intersection with parcel.
Existing Right-of-Way Marker	Follow along existing Right-of-Way until intersection with parcel.
Required Right-of-Way Marker	Follow along Required Right-of-Way until intersection with parcel.

3. Government corners are preferred, but may sometimes be to far from the parcel to be practical as a POC.

4. If the methods listed above are inconvenient or impractical, a “free form” method can be used that does not follow any boundary lines, sometimes with a single course or leg.

5. When more than one path is available for traversing between the POC and POB, it is preferably to choose the shorter of the two.

6. Any of the above methods, when applied correctly, shall be deemed suitable for ALDOT property descriptions.

I. Point of Beginning

1. The Point of Beginning shall be a point lying directly on the boundary of the property being described.

2. The selected POB shall be dictated by the method of traverse chosen from the previous section.

3. The last course within the body of the description shall terminate at the initial Point of Beginning.

4. Properties shall be described in a clockwise direction.

5. The body of the description shall be formatted so that each “course” begins as a new paragraph, with no indentation, and separated by a single line. This clearly defines each change of direction within the description and greatly improves readability.

J. Qualifying Statements

Qualifying Statements are restrictive language added to the description to express exceptions, reservations, covenants, or other limitations. ALDOT typically accomplishes this through the use of various types of “clauses”. The following is a list and brief description of clauses used by ALDOT:

1. Relinquish/Reserve

2. Indirect Access

   LIMITED ACCESS CLAUSE WITH SERVICE ROAD AGREEMENT

This conveyance is made for the purpose of a controlled access facility and adjacent service road or roads, and the grantor hereby releases and relinquishes to the grantee any and all abutter's rights appurtenant to grantor's remaining property, in and to said controlled access facility, provided however, that there is hereby reserved along a line (beginning at a point) the right of ingress to and egress from such remaining property to and from said service road and roads which will be accessible to the controlled access facility only at such points as may be established by public authority.

3. Denied Access

As a part of the consideration herein above stated there is also bargained, sold, conveyed and relinquished to the grantee all existing, future, or potential common law or statutory rights of access between the right of way of the public way identified as Project No. , County of and all of the grantor's remaining property consisting of all parcels contiguous one to another, whether acquired by separate conveyances or otherwise, all of which parcels either adjoin the property conveyed by this instrument or are connected thereto by other parcels owned by the grantor.

4. Limited Access Agreement

This conveyance is made for the purpose of a controlled access facility and adjacent service road or roads and the grantor hereby releases and relinquishes to the grantee any and all abutter's rights appurtenant to grantor's remaining property in and to said controlled access facility, provided however, that there is hereby reserved the right of ingress to and egress from such remaining property to and from said service road or roads which will be accessible to the controlled access facility only at such points as may be established by public authority.

5. Reversion

(Use only after a temporary easement on a deed with acquired right of way—*never* use on a Form 6 or Form 6A-not needed. These are for easements only. Form-6 is for permanent easements)
It is expressly understood that all rights, title and interest to the above-described easement(s) shall revert to the grantor upon completion of said project.

6. Mineral Rights (List Specific Counties)

The Grantors, the Successors and Assigns of said Grantors herein, hereby reserve the mineral rights to the property hereby conveyed to the State of Alabama, but it is understood and agreed by and between the Parties to this conveyance that the rights so reserved will in no way affect or interfere with any of the rights of the State of Alabama for the construction and maintenance of public roads and highways on the property herein conveyed.

7. Beautification

The Party of the second part further agrees not to erect, construct, build or maintain any signs, billboards, outdoor advertisements, junk or scrap metal yards on the said tract in violation of

the Federal Beautification Act of 1965 and amendments thereto or in violation of any State law regulating outdoor advertising and junk yards.

8. Wetland Mitigation (Add Covenant Here or make a new deed form to include new covenants.)
9. Deed of Correction

10. Access to Cemetery

11. As Is Where Is

"And as shown on the right-of-way map of Project No. of record in the State of Alabama Department of Transportation, a copy of which is also deposited in the Office of the Judge of Probate of County, Alabama, as an aid to persons and entities interested therein and as shown on the Property Plat attached hereto and made a part hereof:"

K. Conclusion

This part of the property description is often combined with the body of the description. The conclusion lists the area of the parcel just described. This is also where the "more or less" phrase is applied, immediately following the stated area.

L. "More or Less"

The phrase "more or less" shall be applied once within the conclusion of the property description to avoid "nuisance suits" for insignificant variations. It typically follows the calculated area of the parcel and serves as a "safety net" for the entire description.

M. Seniority of Calls

There are several basic types of calls, which can be used to describe property, all of which may be legally correct. However, hundreds of years of case and common law have forced these calls to be "ordered" in rank of seniority, giving some calls more "power" than others, allowing them to supersede those of lower rank. In Alabama, according to MTS, the general order of calls is as follows:

1) A natural monument
2) An artificial monument
3) A record ad joiner (subject to Junior/Senior rights)
4) A record survey or tie to such
5) Distances
6) Bearings
7) Area
8) Coordinates

N. Informative vs. Controlling

1. From the Seniority of Calls list shown above, calls one (1) through four (4) are considered the bounds calls of the metes and bounds system. These calls are controlling in that they outrank or supersede all other calls.

2. Again, from the Seniority of Calls list shown above, Items five (5) and six (6) are the metes portion of the metes and bounds system and are considered informative calls.

3. Controlling calls shall supersede informative calls in all cases.

4. Metes or measurements are informative, whereas bounds or boundary lines a re controlling.

5. The following course has been diagrammed in the following table to illustrate the function and rank of each call:

"Thence N72º05'40"E along Grantor's property line a distance of 102.23 feet to the existing Right-of-Way line."

Calls	Thence N72º05'40"E	Along Grantor's property line	A distance of 102.23 feet	To the existing Right-of-Way line
Metes	**Yes**	**No**	**Yes**	**No**
Bounds	**No**	**Yes**	**No**	**Yes**
Informative	**Yes**	**No**	**Yes**	**No**
Controlling	**No**	**Yes**	**No**	**Yes**

6. In the example above, if the angle was not exactly as the measurement stated, the "Grantor's property line" would control, likewise, if the distance measurement fell short of the "existing Right-of-Way line", the later would control.

7. This combination of metes and bounds, or informative vs. controlling calls allows for precise measurements for closure checks and area calculations without implying precision that may or may not be present. Once again, this method emphasizes intent over plan measurements and calculations.

O. Protocol

1. The protocol used for structuring calls within a single course or leg shall be as follows:

   Thence "angle measurement" (informative) along "boundary line" (controlling) a distance of "xx feet" (informative) to a "boundary line" (controlling).

2. Angle measurements shall be defined as bearings.

3. Distance measurements shall be defined as feet for imperial units and meters for metric units.

4. Curves shall contain the following data:

   - Chord distance
   - Chord bearing

- Radius
- Length of curve

5. Traversing from the POC to the POB, controlling calls along and to a boundary line shall be one or more of the following:

   - Township Line
   - Range Line
   - Section Line
   - ¼ Section line
   - Military, Forestry, or other government line
   - Present Right-of-Way Line
   - Required Right-of-Way Line
   - Property or Lot Line (referenced from source deed)

6. Controlling calls along the periphery of the subject parcel shall be one of the following:

   - Present Right-of-Way Line
   - Required Right-of-Way Line
   - Grantor's Property Line

7. All of the controlling calls listed above may control either the angle or distance measurements contained within a course.

8. Along the periphery of a parcel, controlling calls are further structured as follows:

Along	To
Grantor's property line	Required Right-of-Way line
	Existing Right-of-Way line
	Flare in Grantor's property line
Required Right-of-Way line	Existing Right-of-Way line
	Grantor's property line
	Flare in Required Right-of-Way line
Existing Right-of-Way line	Required Right-of-Way line
	Grantor's property line
	Flare in Existing Right-of-Way line

P. Precision

1. Some mappers are of the opinion that showing bearings and distances to any significant degree of accuracy implies that we have surveyed each property and are sure of the location of all property lines. That is not the case. Our goal is to take advantage of the automation tools available and to use them to provide the best graphical and mathematical representation possible of the property to be acquired. Therefore, we do use

2. Bearings shall be expressed to the second

3. Distances shall be expressed to at least two decimal places, and sometimes three when describing a small parcel.

4. Controlling calls shall clarify the intent of the description since we do not survey each property and re-establish the exact location of property lines and existing Right-of-Way.

5. Boundary calls shall supersede any measurements that may be less than accurate, based on seniority of calls. The following is a partial list of bounds which should be used as controlling calls, when available, to describe property:

   - An existing property line
   - An existing right of way line
   - An existing ROW marker or property pin
   - A river or creek
   - Station/offsets from a surveyed control line

6. Labeling bearings and distances to any significant degree of accuracy shall not imply that the property has been surveyed nor any degree of accuracy of plotted property lines.

Q. Taking

1. Partial Taking

   When acquiring a segment or segments of a tract, a metes and bounds description shall be used. Additionally, required Right-of-Way markers shall be described using a centerline description as the controlling call.

2. Total Take

   When acquiring the entirety of a tract, the property shall be described using the same method as the source deed.

R. Parcels, Easements, Excess Properties

1. All property segments shall be described on the deed form, with the exception of the remainder.

2. Occasionally, the remainder shall be described if required by the Court or if conveyed as a quitclaim.

S. Revision Date

The last revision number shall be indicated in the header and shall match the revision date indicated on the Property Plat.

XI. Electronic Files

A. File Formats

1. Sheets shall be produced using the file formats listed under ***Source*** in the ***Standard File Formats*** table.

2. The initial submittal and all subsequent submittals of revisions shall be in PDF format and hereto referred to as ***Project Submittals***. Please refer to the ***Standard File Formats*** table.

3. The ***Final Submittal*** shall be in the format as shown in the ***Standard File Formats*** table.

Standard File Formats			
Sheet/File Type	**Source**	**Project Submittals**	**Final Submittal**
Title	Microstation	PDF	Both
Index to Sheets	MS Excel	PDF	Both
Tract Summary	MS Excel	PDF	Both
Project Overview	Microstation	PDF	Both
Plan Detail	Microstation	PDF	Both
Deed	MS Word	PDF	Both
Property Sketch	Microstation	PDF	Both
Geometry	InRoads	N/A	InRoads

4. ALDOT will provide the following startup files:

   - Microstation seed files
   - Microstation sheet borders
   - Microstation automated menu system
   - Microstation level structure
   - Microstation element symbology
   - Microstation cells and symbols
   - MS Excel templates
   - MS Word deed templates

5. All CADD files shall comply with the ALDOT standards.

B. Naming Conventions

1. Folders shall be named as indicated in the **Folder Structure** table.

Folder Structure	
Folder Name	**Description**
Plans	All Microstation design files and Excel workbooks
Deeds	All MS Word documents
Submittals	PDF files for the last 2 Project Submittals

2. Files in the ***Plans*** folder shall be named as indicated in the ***Plans*** table.

Plans		
File Name	**Extension**	**Description**
Hal	Dgn	Horizontal alignment
Top	Dgn	Topography
Prp	Dgn	Property
Drn	Dgn	Drainage
Row	Dgn	Proposed Right-of-Way
Req	Dgn	Required items
Rcl	Dgn	Clips for Right-of-Way plan sheets and property sketches
Rtx	Dgn	Miscellaneous Right-of-Way text
Proposed	Alg	InRoads geometry file
Rtr	Dgn	Right-of-Way tract, parcel and easement shapes
Rps_4	Dgn	Right-of-Way plan sheet #4
Rts	Dgn	Right-of-Way title sheet
Ros	Dgn	Right-of-Way overview sheet
Project_tracts	Xls	Index to Sheets, Tract Summary
Project_plats	Xls	Property sketches
Rsk_1_1	Dgn	Right-of-Way property sketch, tract #1, sheet #1

3. Files in the ***Deeds*** folder shall be named as indicated in the ***Deeds*** table.

Deeds		
File Name	**Extension**	**Description**
Deed_1	Doc	Deed, tract #1

4. Files in the ***Submittals*** folder shall be named as indicated in the ***Submittals*** folder.

Submittals		
File Name	**Format**	**Contents**
Project#_plan	Multi-page PDF	All plan sheets
Project#_deed_tract#	Multi-page PDF	Deed and property sketches per tract

C. CADD Level Structure

1. The following tables define the level structure for each Microstation file.

Right-of-Way Tract Shapes (RTR)	
Level #	**Feature(s)**

D. Symbols

1. All symbols used in the right of way plan assembly shall comply with the ALDOT automated menu system.

2. Symbols should be placed on the appropriate levels and sized according to ALDOT standards to insure readability.

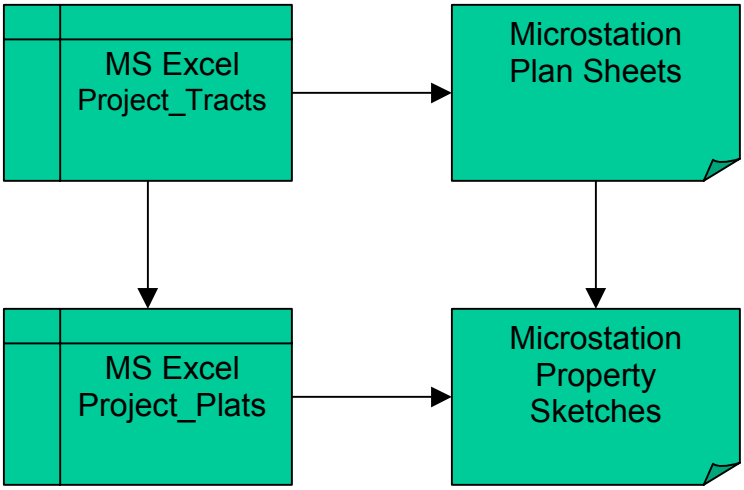
3. A Microstation cell library containing all pertinent right of way symbols will be provided by ALDOT.

E. Excel Worksheets

1. ALDOT will provide MS Excel templates to be used for tract numbers, property ownership, calculations, etc.

2. MS Excel files shall be linked to Microstation files as indicated in the figure:

Add keywords “link” and “Reference” to illustration.



F. Downloads

1. The ALDOT automated menu system, complete with supporting instructional documents, is available for download at the following site: (must have external internet access.)

http://www.dot.state.al.us/bureau/Design/engsupport/Eng_Supp/page3.html

G. PDF Files

1. All Project Submittals shall be in the PDF (Portable Document File) file format.

2. Special utilities are required for the creation of PDF files. These tools can be downloaded from the following sources:

- Adobe Software website
- PDF file plotter for Microstation
- Free download from www.download.com

XII. Schedule for Submittals

A. General

1. The timely revision, submittal and routing of Right-of-Way plans is critical to the Right-of-Way acquisition process. Preliminary estimates of cost, appraisals, title searches, negotiations, administrative reviews, and many other Right-of-Way related tasks couldn't move forward without the latest revision of the Right-of-Way plans.

2. The Right-of-Way plans developer shall be responsible for the timely revision, submittal, and distribution of plans.

3. The State Right-of-Way Engineer or Division Right-of-Way Engineer reserves the right to request an updated set of Right-of-Way plans at any time and for any reason.

B. Plan Stages

The table shown below indicates the major stages of development for the Right-of-Way plans:

Stage	Status	Details
1	Tract Summary, Project Overview & Plan Detail Sheets	Tracts are numbered, areas for all property segments are calculated.
2	Plan Assembly	All sheets in the plan assembly are complete and properly formatted.
3	Latest revision of Plan Assembly	Should address all Plan Assembly comments to date.
4	Latest revision of Plan Assembly & first submittal of Acquisition deeds	Should address all Plan Assembly comments to date. Deeds include deed form and property sketch.
5	Latest revision of the Plan Assembly and Acquisition Deeds	Should address all comments to date.
6	Final submittal of the Plan Assembly and Acquisition Deeds	All comments should be addressed.

C. Project Milestones

The milestones discussed in this section define project deadlines that typically initiate Right-of-Way plans revisions and submittals. Many Right-of-Way plans revisions are driven by design considerations, and many of the milestones are primarily a function of the design process.

Concurrent development of the Right-of-Way and contract plans must occur because each activity has a direct impact on the other.

Right-of-Way plans submittals shall be in accordance with, but not limited to, the following events:

1. 30% Design Review
2. Right-of-Way Authorization
3. Design Approval
4. Plan-In-Hand Inspection
5. Value Engineering Review
6. PS&E Inspection
7. 90% Right-of-Way Review
8. Final Design Plan Review
9. Construction Review
10. Office Engineer Review
11. Project Letting
12. Final Right-of-Way Review
13. Final Submittal

30% Design Review

Stage 1 Plans shall be submitted to the Division Right-of-Way Engineer. Preliminary Right-of-Way limits should be established prior to this submittal. The division shall verify that formatting, labeling and scales selected comply with standards and that overall development of the Right-of-Way plans is moving forward.

ROW Authorization

Stage 2 Plans shall be submitted ??? weeks prior to the target Right-of-Way Authorization date. Comments from the 30% Design review should be addressed prior to this submittal. In order to receive Right-of-Way Authorization from FHWA, a “tract-by-tract” estimate must be performed which includes the “Project Relocation Analysis” (Form ROW-RA-2). In order to prepare this estimate, the Division Right-of-Way Engineer must refer to the Right-of-Way plan assembly.

Design Approval

Stage 3 Plans shall be submitted after this approval with all comments addressed.

Plan-In-Hand Inspection

Stage 4 Plans shall be submitted after this inspection. Any problems with proposed Right-of-Way and easement limits should be resolved by this time. Any “Design” changes (see “Plans Changes” section) after this date require the final approval of the Chief Engineer.

Value Engineering Review

Stage 5 Plans shall be submitted at this time addressing all comments from the Value Engineering Review that affect the Right-of-Way plans.

PS&E Inspection

Stage 5 Plans shall be submitted at this time addressing all comments from the PS & E Inspection that affect the Right-of-Way plans.

90% Right-of-Way Review

Stage 5 Plans are submitted primarily for the purpose of verifying that Right-of-Way and contract plans show identical proposed Right-of-Way and easement limits. Also, structure letters are checked for consistency on both sets of plans.

Final Design Plan Review

Stage 5 Plans shall be submitted at this time addressing all comments from the Final Design Plan Review that affect the Right-of-Way plans.

Construction Review

Stage 5 Plans shall be submitted at this time addressing all comments from the Construction Review that affect the Right-of-Way plans.

Office Engineer Review

Stage 5 Plans shall be submitted at this time addressing all comments from the Office Engineer Review that affect the Right-of-Way plans.

Project Letting

Stage 5 Plans shall be submitted at this time addressing all comments to date that affect the Right-of-Way plans. Any tracts that are not closed at this time will delay Final Submittal.

Final Submittal

Stage 6 Plans shall be submitted at this time. Completion of the Right-of-Way plans shall be defined as that time when all of the following requirements are met:

a) For each tract, acquisition deeds are recorded with the Office of Probate or petition has been filed with the Circuit Court.

b) Final plans and deeds are submitted to ALDOT in PDF format.

c) Final CAD files are submitted to ALDOT on CD.

Note: The paper/PDF submittal will be considered the "Record Copy", and should reflect the contents of the accompanying CD.

D. Timeline

#	Milestone	Stage	Chronology	% Complete	Timing	Comments
1	30% Review	1	Before	10		
2	R/W Authorization	2	Before	15		
3	Design Approval	3	After	35		
4	Plan-In-Hand	4	After	70		
5	Value Engineering	5	After	75		
6	PS&E Inspection	5	After	80		
7	90% R/W Review	5	Before	90		
8	Final Design	5	After	90		
9	Construction	5	After	90		
10	Office Engineer	5	After	90		
11	Project Letting	5	After	90		
12	Final Submittal	6	After	100		

E. Distribution Flowchart

Insert here.

XIII. Plans Changes

A. General

1. Revisions to the Right-of-Way plans may be required for any number of reasons. The revisions process is cyclical, occurring many times during the life of the project.

2. **Every time a revised plan set is published and distributed**, there shall be an accompanying, unique revision number describing the latest revision entries.

3. Revisions to the plan assembly shall be reflected and updated on the deeds.

4. The proposed Right-of-Way and easement limits on the Right-of-Way plans, acquisition deeds, and contract plans shall be identical.

5. Changes to the Right-of-Way plans are further categorized as follows:

   - Miscellaneous
   - Design

6. The distinction between Miscellaneous and Design changes is made because Design changes may require special approval.

B. Miscellaneous

1. Miscellaneous changes are typically corrections or supplements to the Right-of-Way plans including, but not limited to, the following:

   - Existing structures
   - Geometric data
   - Property lines, symbols, and land hooks
   - Section lines & townships
   - North Arrows
   - Project Numbers
   - Deletion or incorporation of tracts
   - Ownership
   - Area computations
   - Deed book & page information
   - General labels and formatting

C. Design

1. A Design change is one that impacts the Right-of-Way acquisition process. Examples of Right-of-Way design changes include, but are not limited to the following:

   - Modification to the alignment geometry
   - Changes to the alignment annotation (stationing)
   - Revisions to the proposed Right-of-Way limits or markers
   - Addition or modification of tracts or proposed easements
   - Revisions to the Denied Access
   - Provisions for access to properties (driveways & turnouts) as concessions to owner

2. All Right-of-Way design changes requested after the Plan-in-Hand Inspection shall be at the discretion of the Project Lead and require a letter of justification, with final approval by the Chief Engineer.

D. Approvals

1. Approvals for Right-of-Way changes are summarized in the following table:

Type of Change	Project Lead	Approval By
Design	Central Office	Design Bureau & Chief Engineer
	Division	Division Pre-Construction Engineer & Chief Engineer
Miscellaneous	Central Office	Division Right-of-Way Engineer
	Division	Division Right-of-Way Engineer

E. Revisions

1. All changes to the Right-of-Way plans shall be noted on the Revisions Sheet.

2. Each time a new version of the Right-of-Way plans is published, there shall be a new revision number and date noted on the Revisions Sheet.

3. The latest revision number and date shall also be labeled on the bottom right corner of all plan sheets.

4. On the Tract Summary sheet, each revision number and date shall be accompanied by one or more revision entries.

5. A revision entry shall consist of the following:

    - Tract number (if applicable)
    - Plan detail sheet number(s)
    - Description
    - Author initials.

6. Each revision entry shall be associated with a specific tract number.

7. The description for each revision entry shall contain sufficient detail to avoid the necessity of referring to the previous version of the plans.

8. If a revision is not tract specific, such as a change in the project number or an incorrectly labeled township, an “n/a” shall be shown under the Tract column on the Revisions Sheet.

9. Descriptions shall be consistently worded to provide the following information:

    - Action taken
    - Affected item(s)
    - Details

10. Details typically explain ***why*** the Action was taken or further defines ***what*** Action was taken.

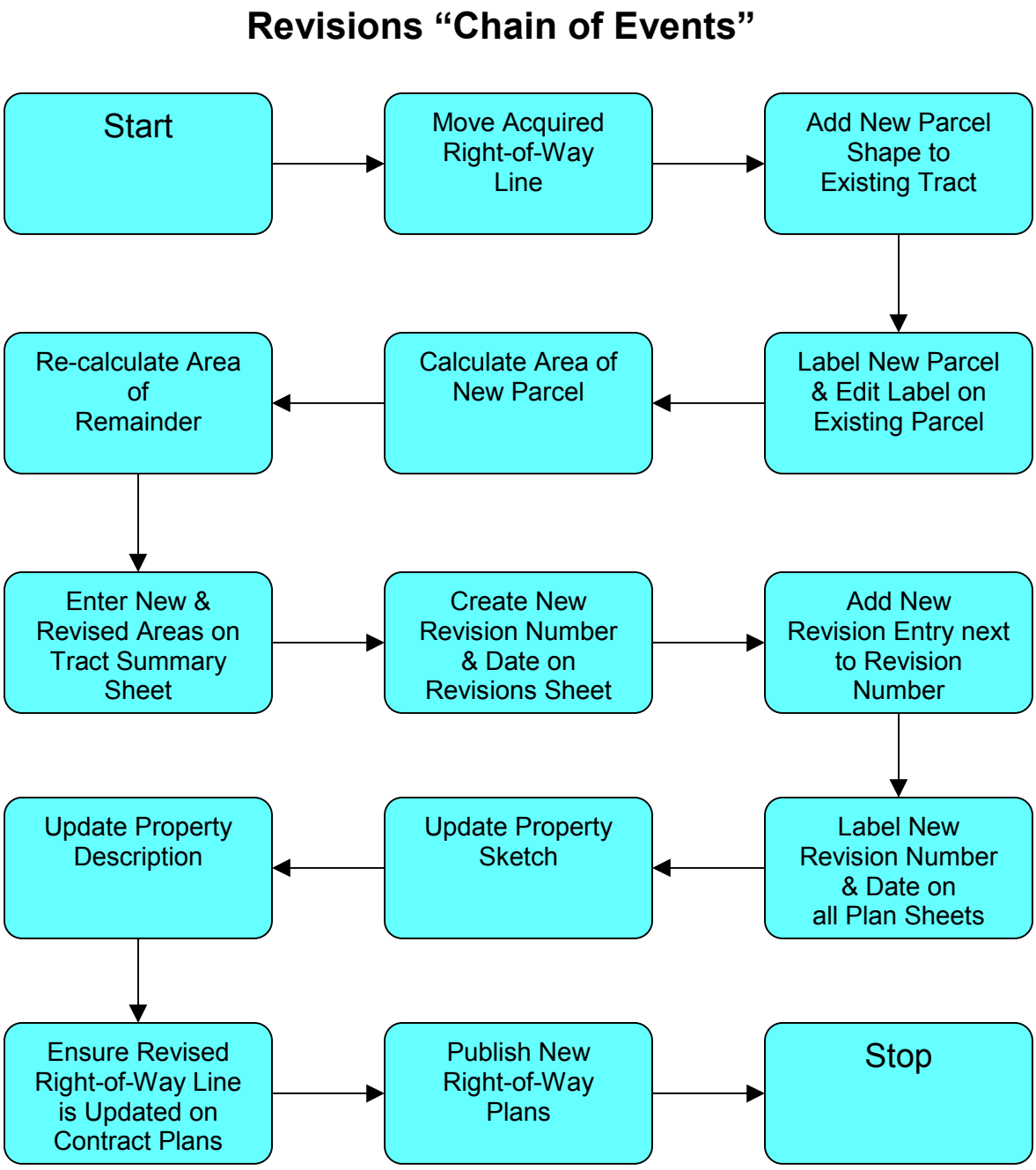
11. Refer to the Revisions Sheet example shown below. The table is interpreted as follows:

- The first entry indicates that the map was first published on August 1st.
- The first revision was published on September 9th and contains three (3) entries.
- The most recent revision, #3, was published on November 8th and contains five (5) entries.

Revision		Tract	Sheet	Description			By
#	Date			Action	Item	Details	
N/A	8/1/02	N/A	N/A	N/A	N/A	First Submittal	ABC
1	9/5/02	5	4-2	Added	Tract	Relocated proposed right-of-way	
		22	4-2	Deleted	Tract	Eliminated proposed right-of-way	
		23	4-3	Incorporated	Tract 22	Same ownership	
2	10/3/02	31	4-4	Updated	Ownership		DEF
		34	4-5	Recalculated	Before & Remainder area	Corrected northern property line	
		46	4-7	Deleted	Tract	Incorporated by tract 48	
		48	4-7	Incorporated	Tract 46		
3	11/8/02	51	4-7	Recalculated	Parcel 1 area	Previous calculation error	XYZ
		N/A	All	Updated	Project Prefix	From NHF to BRF	
		N/A	4-8	Added	North Arrow	Compliance with standards	
		65		Renumbered	TCE	From TCE 1 of 1 to TCE 1 of 2	
		65		Added	TCE 2 of 2		

F. Chain of Events

The flowchart below is an example of the necessary steps initiated by a single revision.



XIV. Projects In Progress

1. Compliance with the guidelines and standards for projects in progress shall be based on the stage of plan development, and the project milestones completed.

2. Compliance for projects that have proceeded beyond the PS&E Inspection shall be at the discretion of the map preparer.

3. The following table shall serve as a guide to determine the level of compliance:

Project Milestone (Prior to)	PDF Submittal	Plan Assembly Sheet Formatting	Labeling	Roll Map, Title, Revisions, Tract Summary
30% Review	X	X	X	
Plan-in-Hand	X		X	X
PS&E Inspection	X			

4. The State Right-of-Way Engineer and the Division Right-of-Way Engineer shall decide the level of compliance for each project in progress.

XV. Recording and Filing

A. Deed

1. After a tract is closed, the acquisition deed must be filed with the Office of Probate. ALDOT division personnel typically file these documents.

2. The original stamped acquisition deed shall be forwarded to the Montgomery Central Office Right-of-Way Bureau.

3. Right-of-Way Bureau shall provide deed recording information to the respective Right-of-Way plans preparer for inclusion on the Tract Summary Sheet.

B. Right-of-Way Plans

The Division shall record the Right-of-Way Plans once all tracts have been closed and the deeds are recorded in probate. Ideally, the tract summary should show the recording data of all tracts before the plan assembly is recorded in probate.

C. Metric Plans

Scan memo and insert here. (about metric deeds)